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ROGER AND NEIMARK 419 SEVENTH STREET, N.W. SUITE 300 WASHINGTON, D.C. 20004

te attached communication from the Examiner

REDDY

NOTICE OF ALLOWANCE AND ISSUE FEE DUE

This notice is issued in view of applic	ant's communication filed				
SERIES CODE/SERIAL NO.	FILING DATE	TOTAL CLAIMS	EXAMINER AND GROUP ART UNIT		DATE MAILED
07/323,665	04/24/89	010	WANG. G	184	09/06/91
First Named Applicant					

TITLE OF INVENTION FSH

	ATTY'S DOCKET NO.	CLASS-SUBCLASS	BATCH NO.	APPLN, TYPE	SMALL ENTITY	FEE DUE	DATE DUE
<u> </u>	IGHETERODIME_	435-069.	400 <u> </u>	ze <u>utili</u>	ry No	\$1050.0	0 12/06/91

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED.

THE ISSUE FEE MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED.

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IMPORTANT REMINDER: Patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees.



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SERIAL NUMBER	FILING DATE		FIRST NAMED APPLICANT		ATTORNEY DOCKET NO.	
07/323,665	04/24/89	REDDY		V	IGHETERODIME	
					EXAMINER	
				WANG, G	-	
ROGER AND N	EIMARK					
419 SEVENTH	STREET, N	. W.		ART UNIT	PAPER NUMBER	
SUITE 300 WASHINGTON,	D.C. 20	004		184	16	
				DATE MAILED:	09/06/91	

	NOTICE OF ALLOWABILITY	
	·	
PART	ARTI. :1 1 . + F 1:0 . T 1 . C .	2061
1. 🗶	1. X This communication is responsive to the Amendment F filed on July 15, 1	771
2. 💢	2. 🕱 All the claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this	s application. If not included
	herewith (or previously mailed), a Notice Of Allowance And Issue Fee Due or other appropriate comm	nunication will be sent in due
	course.	
	3. X The allowed claims are 16 and 18-26	-
4. 🗆	4. 🗌 The drawings filed on are acceptable.	
5. 🗆	5. Acknowledgment is made of the claim for priority under 35 U.S.C. 119. The certified copy has [_] received. [_] been filed in parent application Serial No, filed on	
6. 🗆	6. Note the attached Examiner's Amendment.	
7. 🕱	7. 🐹 Note the attached Examiner Interview Summary Record, PTOL-413.	
	8. Note the attached Examiner's Statement of Reasons for Allowance.	
	9 Note the attached NOTICE OF REFERENCES CITED, PTO-892.	
	Note the attached INFORMATION DISCLOSURE CITATION, PTO-1449.	
PART	ART II.	
Extens	ROM THE "DATE MAILED" indicated on this form. Failure to timely comply will result in the ABANDO xtensions of time may be obtained under the provisions of 37 CFR 1.136(a). 	• • • • • • • • • • • • • • • • • • • •
2. 🏹 <i>i</i>	APPLICANT MUST MAKE THE DRAWING CHANGES INDICATED BELOW IN THE MANNER SET FOR OF THIS PAPER.	TH ON THE REVERSE SIDE
a. [a. Drawing informalities are indicated on the NOTICE RE PATENT DRAWINGS, PTO-948, attach CORRECTION IS REQUIRED.	ied hereto or to Paper No.
b. [b. The proposed drawing correction filed on has been approved by the REQUIRED.	examiner. CORRECTION IS
	c. Approved drawing corrections are described by the examiner in the attached EXAMINER'S AMERICAL REQUIRED.	ENDMENT. CORRECTION IS
d,X	d Formal drawings are now REQUIRED.	
-	ny response to this letter should include in the upper right hand corner, the following information from the ND ISSUE FEE DUE: ISSUE BATCH NUMBER, DATE OF THE NOTICE OF ALLOWANCE, AND SERIAL NUMBE	
Attachr	ttachments:	•
	Examiner's Amendment Notice of Informal Application, PTO-152	
X Exan	Examiner Interview Summary Record. PTOL- 413 Notice re Patent Drawings. PTO-948	
	Reasons for Allowance Listing of Bonded Draftsmen	
	Notice of References Cited. PTO-892 Other	
	Information Disclosure Citation, PTO-1449	

Gian WANG

JACQUELINE STONE PRIMARY EXAMINER ART UNIT-184

Serial No. 07323665 Art Unit 184

Claim 16. A mammalian cell comprising a transformed cell transformed by at least a first expression vector, said transformed cell being capable of producing a biologically active heterodimeric human fertility hormone comprised of an alpha subunit and a beta subunit, each said subunit being encoded in nature by a distinct mRNA, said hormone being human FSH, the alpha subunit of said hormone being encoded by said first expression vector and the beta subunit of said hormone being encoded by said first expression vector or by a second expression vector by which said transformed cell is also transformed, or progeny of said transformed cell containing the genetic information imparted by said vector or vectors.

Claim 18. A mammalian cell in accordance with claim 26, said second expression vector being autonomously replicating.

Claim 19. A mammalian cell in accordance with claim 16, said first vector being a plasmid.

Claim 20. A mammalian cell in accordance with claim 16, the alpha and beta subunits of said heterodimeric hormone being encoded by said first expression vector.

Claim 2. A mammalian cell in accordance with claim 16, transcription of the alpha and beta subunits of said

Serial No. 07323665 Art Unit 184

heterodimeric hormone being under the control of the mouse metallothionein promoter.

- Claim 22. A mammalian cell in accordance with claim 1/6, said cell being a mouse cell.
- Claim 23. A mammalian cell in accordance with claim 16, said first expression vector being autonomously replicating.
- Claim 24. A method for producing the biologically active human fertility hormone FSH comprising culturing host mammalian cells in accordance with claim 36 in which said first expression vector encodes the alpha subunit of said FSH and said second expression vector encodes the beta subunit of said FSH.
- Claim 25. The method of claim 24, wherein each said expression vector is autonomously replicating.
- Claim 26. A mammalian cell in accordance with claim 16, wherein said beta subunit is encoded by a second expression vector, distinct from said first expression vector, said transformed cell also being transformed by said second expression vector.